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A.D. 1854 . . . . . N<sup>o</sup> 180.

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S P E C I F I C A T I O N

OF

WILLIAM MASSEY.

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ARTIFICIAL TEETH AND GUMS.

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L O N D O N :

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,  
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY :

PUBLISHED AT THE QUEEN'S PRINTING OFFICE, EAST HARDING STREET,  
NEAR FLEET STREET.

*Price* 3*d.*

1854.







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Artificial Teeth and Gums.

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**LETTERS PATENT** to William Massey, of Hemer Terrace, Bootle-cum-Linacre, near Liverpool, in the County of Lancaster, Manufacturer of Mineral Teeth, for the Invention of “**IMPROVEMENTS IN ARTIFICIAL TEETH AND GUMS.**”

Sealed the 25th April 1854, and dated the 24th January 1854.

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**PROVISIONAL SPECIFICATION** left by the said William Massey at the Office of the Commissioners of Patents, with his Petition, on the 24th January 1854.

I, WILLIAM MASSEY, of Hemer Terrace, Bootle-cum-Linacre, near Liverpool aforesaid, Manufacturer of Mineral Teeth, do hereby declare the nature of the said Invention for “**IMPROVEMENTS IN ARTIFICIAL TEETH AND GUMS**” to be as follows (that is to say):—

In colouring, or staining, or using a substance coloured or stained, corresponding to the natural colour of the gums throughout the whole mass  
10 or base used to form the artificial gums, or so much of the same as may be desirable, in place of the ordinary method now in use of making mineral teeth with gums attached, which consists of only colouring the portion to represent the gums on the outer surface, the base or substance being of the same colour as the teeth, in consequence of which any portion being chipped or ground off  
15 from the surface (which is frequently the case in adapting them to the mouth) the gum colour is lost on that part.



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*Massey's Improvements in Artificial Teeth and Gums.*

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These improved artificial gums may be manufactured either independently or with the teeth attached thereto, as now commonly practised in making mineral teeth and gums. When the teeth and gums are formed separately it is proposed to form recesses in the artificial mineral gums to receive the base of the mineral teeth, which can be held in their position by a wire passing 5 vertically through the artificial teeth and gums, and riveting or fixing them to the metal mouth-plate thereby, or any other convenient mode. The advantage of this arrangement is that the length, &c. of the teeth can be more readily altered to suit the mouth.

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**SPECIFICATION** in pursuance of the conditions of the Letters Patent, filed 10 by the said William Massey in the Great Seal Patent Office on the 24th July 1854.

**TO ALL TO WHOM THESE PRESENTS SHALL COME**, I, WILLIAM MASSEY, of Hemer Terrace, Bootle-cum-Linacre, near Liverpool, in the County of Lancaster, Manufacturer of Mineral Teeth, send greeting. 15

**WHEREAS** Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Twenty-fourth day of January, in the year of our Lord One thousand eight hundred and fifty-four, in the seventeenth year of Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said William Massey, Her special licence that I, the said William Massey, my 20 executors, administrators, and assigns, or such others as I, the said William Massey, my executors, administrators, and assigns, should at any time agree with, and no others, from time to time and at all times thereafter during the term therein expressed, should and lawfully might make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel 25 Islands, and Isle of Man, an Invention for "**IMPROVEMENTS IN ARTIFICIAL TEETH AND GUMS**," upon the condition (amongst others) that I, the said William Massey, by an instrument in writing under my hand and seal, should particularly describe and ascertain the nature of the said Invention, and in what manner the same was to be performed, and cause the same to be filed in the 30 Great Seal Patent Office within six calendar months next and immediately after the date of the said Letters Patent.

**NOW KNOW YE**, that I, the said William Massey, do hereby declare the nature of the said Invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement 35 thereof (that is to say):—



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*Massey's Improvements in Artificial Teeth and Gums.*

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Heretofore in the manufacture of artificial teeth and gums from mineral substances it has been usual to apply the coloring matter for the parts representing the gums only to the outer surface thereof, whilst the base or all except just the surface of the material remains white or of a light color, and when, as  
5 is frequently the case in adapting the gums to the mouth, any portion becomes chipped or ground off, or is otherwise worn off, the color on the surface of that part (and applied in imitation of a natural gum) is lost, and the defect is thereby made more perceptible; and my improvements consist, first, in the application of coloring or staining matter throughout the entire mass or sub-  
10 stance of which such artificial gums are composed, or of so much of the whole substance or mass as may be desirable, in order to provide against any variation of colour being observable, in the event of chipping or grinding taking place.

The mineral matters employed by different manufacturers of mineral teeth vary. I however lay no claim to any of such matters separately, but having  
15 obtained such matters either in the powdered or in a plastic state, I mix therewith any suitable coloring matter that will incorporate itself therewith, and give the desired color thereto as near as possible to imitate the natural gum. The coloring matter which I have found to answer well consists of gold leaf or gold filings combined with felspar, in the proportion of eighty grains of gold  
20 leaf or gold filings to one oz. of calcined felspar, ground or otherwise, intimately mixed together. Of the coloring matters thus obtained, I usually employ about four pennyweights to one pound of mineral composition (such as is usually employed by manufacturers of artificial mineral teeth); but I do not confine myself to these proportions, as they may be varied according to the degree of  
25 colour required. The coloring matter in all cases should be ground or otherwise intimately mixed with the mineral composition. I usually proceed, first, to mould material of a tooth color to the form of the proposed teeth (one or more), I then add thereto mineral material colored, as explained, giving to it the desired form of the intended gums or portion of gums, and I then fire or burn  
30 the same, as at present practised, when manufacturing teeth and gums from mineral matters. Mineral matters thus colored to the desired gum color may be moulded into the desired gums and finished independently of the teeth, or the teeth may be moulded and applied to the gums whilst such materials are in the plastic or powdered state and before firing, or the parts may be united  
35 by the fusion of vitreous matter or glaze between the teeth and gums. When the artificial gums and teeth are produced separately, according to the second part of my Invention, I form the artificial gum with recesses or undulations, suitable to receive the base of the teeth, and I hold the teeth in position on the gums by wire passed through holes formed for the purpose through the artificial



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*Massey's Improvements in Artificial Teeth and Gums.*

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teeth and gums, and also through the metal mouth plate, when one is used, and then rivetted; but the mode of fixing the parts together, as also to the metal mouth plate, when a mouth plate is employed, may be varied, as I do not confine myself to the means of fixing together such teeth and gums. And gums prepared according to my Invention may have applied to them artificial 5 teeth made of other material than that referred to.

When the artificial gums are made, as here explained, separately from the teeth, the teeth may be more readily adjusted in length or otherwise, as may be desired, than when formed with the gum.

Having thus described the nature of my said Invention, I would have it 10 understood that I do not confine myself to the precise details herein mentioned; but what I do claim is,—

First, the combining or incorporating with mineral substance to form artificial gums of coloring or staining matters, as herein explained.

And, secondly, I claim the forming of artificial gums of mineral substance 15 separately from the teeth, and the fixing thereto of suitable teeth, as herein explained.

In witness whereof, I, the said William Massey, have hereunto set my hand and seal, this Eighteenth day of July, in the year of our Lord One thousand eight hundred and fifty-four. 20

WILLIAM MASSEY. (L.S.)

Witness,

EDW<sup>D</sup> J. MASSEY.

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LONDON :

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,  
Printers to the Queen's most Excellent Majesty. 1854.